



5.5 Transportation & Parking

This section presents a summary of findings from the planning team's analysis of transportation conditions along H Street. The summary is organized around the following:

- Traffic and Street Operations
- Parking Analysis
- Bus Transit Conditions
- Bicycle Conditions
- Pedestrian Conditions
- Truck Loading Issues

Traffic and Street Operations

H Street is used during the morning and evening rush periods as a commuter route into and out of the downtown core for residents who live in the eastern part of the District and in the Prince George's County suburbs. According to DPW's 1999 ADT Maps, the 'Average Daily Traffic' (ADT) volume for H Street (24,000 vehicles per day) is approximately the same as the ADT volume for U Street (23,000 vehicles per day). In addition, the average daily traffic volume for H Street is approximately half as heavy as the ADT volume for Benning Road (42,000 vehicles per day) and lower than many other similarly sized roadways with the exception of U Street. H Street has a higher average traffic volume than Bladensburg Road (with 17,000 vehicles per day) and Maryland Avenue (with 8,000 vehicles per day).

While the purpose of this study is to determine how H Street should be redeveloped, and to facilitate a more

pedestrian, bicycle, and transit-oriented roadway, it is important to remember that H Street is an important east-west route for morning and evening commuters. As a result, the fact that H Street is a major east-west commuter route should be incorporated into the new design of the roadway, in addition to any other design enhancements that might be made in the future.

Existing traffic volumes were obtained for the signalized intersections of H Street/6th Street and H Street/13th Street, from the District of Columbia Department of Public Works, Bureau of Transportation Services. A field reconnaissance was conducted to obtain the existing lane usage, signal phasing, and signal timings for each intersection. The current posted speed limit along H Street is 25 miles per hour however, peak period traffic appeared to be moving faster than the posted speed limit when observed.

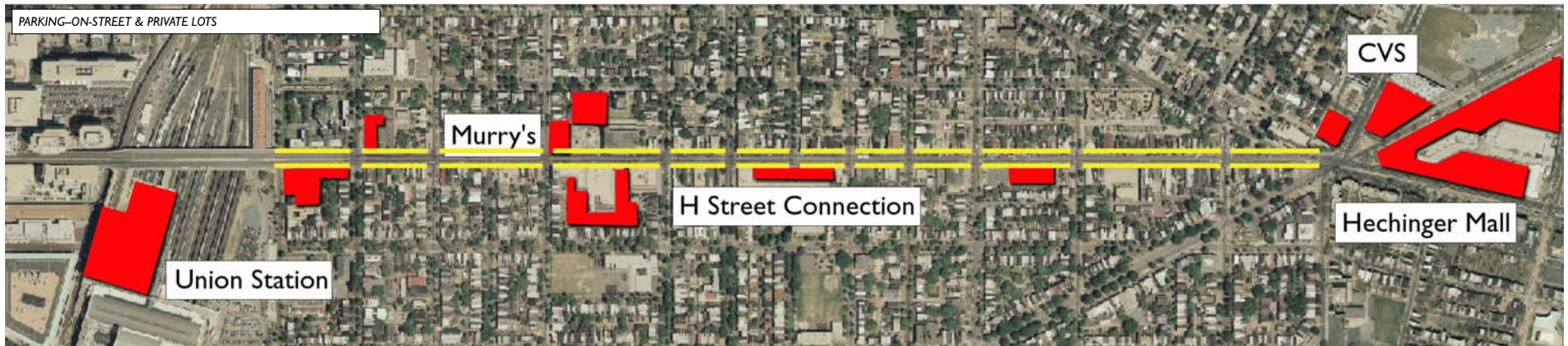
Intersection capacity analyses were performed for the A.M. and P.M. peak hours at the H Street/6th Street intersection and for the A.M. peak hour at the H Street/13th Street intersection. The capacity analyses are based on methods outlined by the Transportation Research Board's Special Report 209 Third Edition: Highway Capacity Manual (HCM), 2000. Levels of Service (LOS) for a capacity analysis range from 'A' (best) to 'F' (worst), as described in the report Appendix. The traffic signals are controlled by the DC DPW computerized signal system and both signals operate on an 80-second cycle length during both the A.M. and

P.M. peak periods. The results of the capacity analyses for existing conditions in the following table.

Existing Capacity Analysis

Roadway Intersection	Delay & Direction of Travel	Level of Service Delay (in seconds/vehicle)	
		A.M. Peak Hour	P.M. Peak Hour
H Street/6th Street (signalized intersection)	Total Delay	B (15.0)	C (21.6)
	Northbound	C (23.5)	C (22.1)
	Eastbound	B (10.5)	C (24.7)
	Westbound	B (12.7)	A (9.4)
H Street/13th Street (signalized intersection)	Total Delay	B (15.8)	B (16.7)
	Northbound	C (30.0)	C (22.7)
	Southbound	B (18.7)	B (18.9)
	Eastbound	A (9.8)	B (17.7)
	Westbound	B (15.4)	A (9.1)

The analyses of existing traffic volumes indicate that both intersections operate at acceptable Levels of Service during both A.M. and P.M. peak hours. An operational Level of Service of 'E' or higher is generally considered to be 'acceptable' for an urban street like H Street, during a peak hour. The above intersection capacity analyses of the H Street/6th Street and H Street/13th Street sample intersections, along with supplemental field observations, indicate that H Street currently operates within its capacity during the peak weekday hours, west of the Maryland Avenue/Florida Avenue/Benning Road intersection. Average



daily traffic volumes are significantly heavier along Benning Road, east of the Maryland Avenue/Florida Avenue/Benning Road intersection, and as a result, those intersections likely operate at lower Levels of Service.

As part of this revitalization effort, the H Street redevelopment team is proposing to reconfigure the H Street/Benning Road/Maryland Avenue/Florida Avenue intersection to allow for landscaping opportunities at the corridor's eastern gateway. This reconfiguration is proposed primarily for pedestrian safety and aesthetic reasons; however it should also provide an opportunity to improve traffic conditions at a primary commuter intersection. It is recommended that the District Department of Transportation conduct a traffic study in order to assess the traffic implications of any geometric improvements to the intersection, prior to the implementation of any such improvements.

Parking Analysis

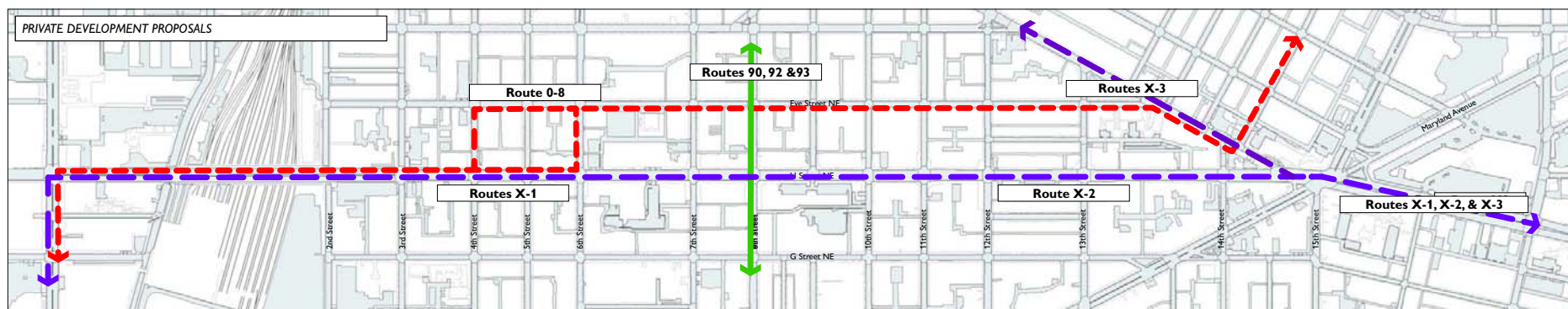
The H Street corridor currently contains both on-street and off-street parking within the study area (Figure 1). On-street parking is generally available along H Street during all times except during the period of the predominant flow of commuter traffic in the morning and in the evening. As a result of these existing parking restrictions, several H Street business owners have complained about the restrictions as hindering customer access to the business locations during the restricted times. On-street parking is generally

restricted along H Street along the north side of the street (along the westbound traffic side) from 7:00 – 9:00 AM and on the south side of the street (along the eastbound traffic side) during 4:00 – 6:30 PM. A mix of metered (2-hour parking permitted Monday through Friday, 9:00 AM – 6:30 PM) and residentially zoned parking spaces is located on the north-south streets within the study area. The corridor currently contains 336 on-street spaces on H Street, which appear to be primarily used by H Street business customers and merchants.

The off-street parking lots located in the study area currently contain approximately 850 spaces. These lots are generally restricted for patrons of the commercial and institutional uses located along H Street and are not for use by the general public. The one lot, which contains general public parking, is located at the intersection of H Street and 3rd Street and contains approximately 110 spaces. The remaining 740 off-street spaces are located in the other off-street lots contained in the H Street study area.

Parking opportunities in the H Street corridor are dependant upon future H Street development because there could be more off-street parking made available in the future as buildings are removed or added, according to the development plan. However, the following two existing locations could potentially help to serve a very small portion of the off-street parking needs in the H Street corridor:

- Union Station. There is currently a significant amount of parking (1,387 spaces) located at Union Station and there could potentially be additional development located here in the future. As a result, assuming that the parking located here in the future would be adequate enough to meet the future Union Station parking demand and the demand generated by any additional future development located at Union Station, some of the future parking could potentially be available for use by other future development located in the H Street corridor.
- Hechinger Commons Shopping Center. The parking lot for the Hechinger Commons Shopping Center could potentially be made available for shared parking use with H Street corridor commercial/institutional uses during non-shopping center business hours. For example, people who drive to H Street destinations during the evening could potentially use the Hechinger Commons Shopping Center parking lot after the shopping center stores close. However, this shared parking arrangement would likely require some sort of formal agreement between the shopping center owner(s) and H Street businesses. In addition, the Hechinger Commons Shopping Center could also potentially charge for the use of its extra parking spaces that are regularly unused (e.g. spaces located the furthest from the shopping center) during shopping center business hours.



Union Station generally has higher parking occupancies during weekday business hours, while shopping centers such as the Hechinger Commons Shopping Center typically have higher occupancy rates during evening weekdays and mid-day on Saturday. Businesses located along H Street likely have greater parking occupancies during weekday business hours and mid-day on Saturday. Union Station and Hechinger Commons are located at each end of the corridor and would likely be useful as local off-street 'overflow' parking for people who could not find other off-street or on-street parking along H Street. Both of these potential off-street parking locations would be made more accessible by a future light rail/bus transit or shuttle bus line along H Street, which would link the commercial uses along H Street to the parking locations. Also, the likely success of using these parking facilities for H Street commercial establishments will depend on the nature of the area as a destination.

Bus Transit Conditions

The H Street corridor is served by the following bi-directional Metrobus routes: X1, X2, X3, D8, 90, 92, and 93. The Metrobus routes serving the H Street study area are shown in Figure 2. The X1 and X2 routes serve the entire length of the corridor. The X3, D8, 90, 92, and 93 routes have stops located at key intersections along H Street, and the 90, 92, and 93 routes all have a stop at 8th Street, which is the study area's midpoint.

The end points for the X1 Metrobus route are located at the Minnesota Avenue Metrorail station and the State Department in Foggy Bottom. The X2 route travels

between the Minnesota Avenue Metrorail station and Lafayette Square, and the X3 Metrobus route travels between the Minnesota Avenue Metrorail station and McLean Gardens in northwest Washington, D.C. The D8 bus route travels between the Washington Hospital Center and Union Station, Route 90 travels between the Anacostia Metrorail station and McLean Gardens, and routes 92 and 93 both travel between the Congress Heights Metrorail station and McLean Gardens.

Metrobus routes and key transit transfer points easily connect the H Street Corridor to virtually all major employment and population centers in the District of Columbia, including: Downtown, Capitol Hill, the Washington Hospital Center; and the U Street Corridor. The bus routes provide direct access to key transfer points located at the Union Station, Gallery Place-Chinatown, New York Avenue (under construction), Anacostia, and Minnesota Avenue Metrorail stations.

Overall frequency of service along the H Street Corridor is very good, with 15-30 minute headways for most buses during off-peak hours and every 10-20 minutes during peak hours. Weekend service averages between 20-45 minute headways. Some community members complain that the buses are over-crowded during some off-peak periods, particularly during the middle of the day.

Metrobus stops are located every two blocks along H Street in the study area. Approximately half of the Metrobus stops are sheltered stops. Most of the Metrobus stops located in the study area appear to be heavily utilized, and the frequent

number of buses stopping along H Street, do not appear to significantly impede the traffic flow during rush periods.

The following table provides the weekday ridership and average number of passengers per hour for the seven Metrobus routes, which serve the H Street study area.

Existing Metrobus H Street Routes and Ridership

Route	Origin	Destination	Weekday Ridership	Avg # of Riders per Hour
D8	Washington Hospital Center	Union Station	5,002	51
X1	Minnesota Avenue Station	State Dept in Foggy Bottom	1,684	46
X2	Minnesota Avenue Station	Lafayette Square	16,333	84
X3	Minnesota Avenue Station	McLean Gardens NW	1,684	46
90	Anacostia Metrorail Station	McLean Gardens NW	17,128	50
92, 93	Congress Heights Station	McLean Gardens NW	17,128	50

'Metrobus Performance Assessment Report', July 2002



Bicycle Conditions

The following bicycle-related characteristics currently exist in the study area, which affect the quality of the local bicycling environment:

- On-street parking is generally restricted along H Street along the north side of the street (along the westbound traffic side) during 7:00 – 9:00 AM and on the south side of the street (along the eastbound traffic side) during 4:00 – 6:30 PM.
- Traffic volume along H Street is consistently heavy with speeds that appear to be in excess of 35 mph.
- There is limited room available between on-street parked cars and the traffic lane for safe cycling.
- Sidewalks along H Street are narrow (less than 6 feet in some locations) and have heavy foot traffic.
- Blocks are short, with frequent curb cuts and intersections, which presents a cyclist with frequent potential vehicular conflict locations.
- Relatively heavy traffic volumes and confusing traffic patterns at the H Street intersection with Benning Road, Bladensburg Road, Florida Avenue, and Maryland Avenue, are difficult for cyclists to negotiate.
- The Hopscoth Bridge has no curbside parking and fast-moving traffic, provides the most direct street access between the H Street corridor and Downtown.

H Street is neither an official or unofficial on-road bike route. However, the streets located to the immediate north and south of H Street form a dense grid of streets, with relatively light and slow-moving (less than 25 mph) traffic volumes, which makes the local neighborhoods pleasant for bicycling. H Street is connected to two official 'on-road' bike routes, which are located along 4th and 6th Streets, (Figure 3). Both 4th Street and 6th Street have striped bicycle lanes in one direction, along the blocks south of H Street. 4th and 6th Streets connect the H Street Corridor with Union Station, the extensive bicycle lane network on Capitol Hill, the National Mall, and Anacostia.

Two 'unofficial bike routes' located along 12th Street, NE, and Maryland Ave, NE, also intersect with H Street at its eastern end, and connect the H Street Corridor with neighborhoods throughout the Northeast Quadrant of the District, as well as to the Anacostia watershed. K Street NE, which is located two blocks to the north of H Street, is an 'unofficial bike route' that provides direct access to downtown Washington, D.C. and the Metropolitan Branch Trail.

The Metropolitan Branch Trail is a multi-use, on-road and off-road bike trail, which connects the neighborhoods of northeast D.C. and Union Station (located to the south), with residential, recreational, and commercial nodes located in Silver Spring, Maryland. Overall, H Street is not very bicycle-oriented, however, its location within a dense grid

of residential streets (many of which are either official or unofficial bike routes) with low traffic volumes, situates it within a local area with a pleasant bicycling environment. H Street is also located within close proximity to many significant commercial and recreational activity centers within the District of Columbia, as shown in Figure 3.

Pedestrian Conditions

Pedestrian traffic is generally moderate to fairly heavy along H Street, with significantly more people observed crossing the north-south cross-streets along H Street, than H Street itself. All of the H Street intersections contained in the study area are signalized and have double-lined crosswalks, which appear to have been recently painted and are clearly visible. The lengths of the green/walk signal 'phases' at each of the intersections appear to be adequate for the elderly and disabled to safely cross H Street and all of the cross-streets along H Street.

In general, pedestrian traffic in the study area does not appear to impact vehicular traffic traveling along H Street, due to a lack of 'jay-walking' and/or large pedestrian volumes crossing H Street. This is likely due to the wide cross section of H Street, the relatively fast travel speed of traffic traveling along H Street, and the lack of adequate crossing gaps, all of which, make H Street unattractive for crossing at times other than during the pedestrian signal phases.

Truck Loading Issues

Illegally parked commercial delivery vehicles are a citywide issue. Trucks that double park in travel lanes create a 'bottleneck' effect when through vehicles are forced to merge into fewer travel lanes. This results in traffic congestion in the city's commercial districts during peak and non-peak time periods.

Commercial delivery vehicles currently park in loading/unloading areas located behind buildings along H Street, in off-street parking lots located in front of buildings where available, or on H Street, where there is no off-street delivery space available. Thus, there currently appears to be a Free Loading Zone parking strategy in place (see Appendix), along H Street in the study area.

Three other more sophisticated on-street commercial parking strategies, which could potentially be implemented in the future, include: Commercial Permit Parking, Metered Zone Parking, and Premium (Exclusive) Zone Parking. Each strategy has numerous features, advantages, and disadvantages, which are listed in the Appendix.

The future H Street commercial community, along with the District government, should determine which on-street commercial delivery parking strategy would be the most

appropriate for the H Street study area. The determination of the most appropriate future strategy, however, will likely have to wait until a redevelopment plan is formulated and implemented along the H Street study area.

Transit Enhancements (Planned)

In the fall of 2000, the District of Columbia's Division of Transportation (DDOT) and Office of Planning (OP) entered into a joint project with the Washington Metropolitan Area Transit Authority (WMATA) to conduct a preliminary analysis of 12 transit corridors that may provide opportunities for improving mobility within the District of Columbia. Identification of the corridors selected for study was based on the District's 1997 A Transportation Vision, Strategy, and Action Plan for the Nation's Capitol and of WMATA's 1999 Transit Service Expansion Plan. One of the twelve corridors studied connected Woodley Park Metro to Minnesota Avenue Metro via H Street and Benning Road.

The study was conducted in two phases. Phase 1 produced an initial screening of the corridors based on mobility or ridership service potential, potential relief for the Metro system within the region's central core, construction potential, and other factors. As part of Phase 2, a second screening was conducted to organize corridors into: 1) Corridors that appear to be good candidates for more

detailed planning, 2) Corridors for consideration in a special East of the Anacostia River.

A third screening was then conducted considering appropriateness for advancement to a more detailed level of planning, service to District Residents, opportunities for transit supported economic development, and other factors. The purpose of the third screening was to identify the two or three corridors that appear to be the most promising corridors for advancement to a more detailed level of planning as part of a federal alternative analysis. The Woodley Park Metro to Minnesota Avenue Metro via H Street was one of the three selected corridors.

The Woodley Park Metro to Minnesota Avenue Metro corridor is projected to serve between 22,000 to 26,500 daily riders by 2025.

DDOT is planning a more detailed study of this route in 2003. The study is expected to take one to two years and would determine a more specific alignment for the transit corridor.